

To: Ferguson, Scott@Waterboards[scott.ferguson@waterboards.ca.gov]
Cc: Hillenbrand, John[Hillenbrand.John@epa.gov]; Wetmore, Cynthia[Wetmore.Cynthia@epa.gov]; Barton, Dana[Barton.Dana@epa.gov]; Greg Reller (gr@burlesonconsulting.com)[gr@burlesonconsulting.com]; anthony.brown@bp.com[anthony.brown@bp.com]; Carey, Douglas@Waterboards[douglas.carey@waterboards.ca.gov]; Stetler, Chris@Waterboards[Chris.Stetler@waterboards.ca.gov]; Brown, Anthony R (RM)[anthony.brown@bp.com]; Gary Riley[Riley.Gary@epa.gov]; Stetler, Chris@Waterboards[Chris.Stetler@waterboards.ca.gov]; Atyam, Kartik[kartik.atyam@aecom.com]; Wirtschafter, Joshua[Wirtschafter.Joshua@epa.gov]
From: Deschambault, Lynda
Sent: Wed 6/14/2017 5:51:28 PM
Subject: RE: Leviathan Mine: Proposed Slope Stabilization Measures

Dear Mr. Ferguson:

Thank you for the telephone call yesterday to discuss the Water Board's proposal to conduct construction for temporary repair at the Pond 4 Slope Failure. In consideration of Water Board's June 12th submittal and yesterday's subsequent conversation; EPA requests the following to expedite our review and determine if a consultation with EPA headquarters is necessary prior to approving the proposed slope repair.

- 1) Please provide an opportunity for EPA engineer Cynthia Wetmore to be in contact with your AECOM contractor for technical discussions and review of your slope stability analysis.
- 2) Please provide an estimate of the factor of safety of the Pond 4 slope as-is prior to construction.
- 3) Please clarify whether the material to be excavated at the Pond 4 slope is currently dry enough to be worked with.
- 4) Please provide a site plan showing the locations and numbers for nearby monitoring wells along the Crusher Road, and in the vicinity of Pond 4. And the monitoring locations under Atlantic Richfield's current slop monitoring plan.
- 5) The construction sequence appears to be logical, however EPA seeks confirmation that the entire toe (ie material currently resisting movement) at the slope failure will not be removed all at one time. EPA requests that the construction be staged so that as one section of the gravel buttress is emplaced, remaining sections of the toe remain so that the slope is not likely to fail as a result of construction.
- 6) The proposed drain is expected to relieve pressure in the slope. The water to be drained is of uncertain quality. Should the drained water be similar to water currently

captured at CUD and/or Delta Seep, EPA would like that water to be directed to Pond 4. EPA requests that the drain be equipped with a sump and valve so that if necessary, the drainage water could be pumped to Pond 4, and/or the drainage flows can be otherwise controlled. EPA expects that directing the flow to Pond 4 would be achieved after reaching agreement with Atlantic Richfield.

Please provide a response by June 16. I will be out of the office thru July 15th---the information should be delivered to Gary Riley of US EPA with a cc to myself.

Best Regards,

Lynda Deschambault

Environmental Scientist

USEPA Region 09

(415) 947-4183

From: Ferguson, Scott@Waterboards [mailto:scott.ferguson@waterboards.ca.gov]

Sent: Monday, June 12, 2017 11:12 AM

To: Deschambault, Lynda <Deschambault.Lynda@epa.gov>; Riley, Gary <riley.gary@epa.gov>

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Subject: Leviathan Mine: Proposed Slope Stabilization Measures

Importance: High

Lynda,

Attached are the draft plans for proposed stabilization measures for the soil slump east of Pond 4 (labeled as Project Plans for Lower Pond 3 Road Temporary Slide Repair in attached pdf file). You will note the plans include various measures to increase slope stability and improve roadway conditions for the passage of heavy equipment and large truck traffic to the upper portions of the mine site for the implementation of the Water Board's summer campaign treatment of acid mine drainage. The plan set includes various plan views, details, and sections for the proposed stabilization measures. Plan sheet C502 presents the sequencing of construction in sectional views. The construction sequencing was developed in a manner that ensures increasing slope stability as the project progresses. During construction, a Professional Engineer and/or Geologist will be present to monitor and oversee construction activities as they progress and to direct any necessary field adjustments. The emergency communication plan, including call-out tree, as set forth in the recently approved document for proposed activities in the Beaver Pond/Dam Complex will be followed during construction.

Per your request, Water Board staff is awaiting USEPA's authorization to implement the measures set forth in the attached drawings. Once we receive USEPA's authorization, we will instruct AECOM to finalize the drawings with appropriate professional stamp/signature for construction, and commence construction of the proposed stabilization measures. Water Board staff is requesting USEPA's prompt consideration and authorization to proceed. Please let us know if you have any comments or questions regarding the proposed stabilization measures. We look forward to receiving USEPA's authorization as soon as possible, so the Water Board can complete the project and transition to normal pond water treatment operations.

Scott C. Ferguson

Supervising Water Resource Control Engineer

Regulatory and Compliance Division

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